Section 4.4

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4.4 BIOLOGICAL RESOURCES

This section describes existing conditions and the potential biological resource impacts associated with the construction and operation of the Proposed Project and alternatives. Potential impacts to protected species, Applicant Proposed Mitigation Measures (APMs), and species-specific mitigation measures are discussed in Sections 4.4.3: Applicant Proposed Measures and 4.4.6: Biological (Species-Specific) Mitigation Measures, respectively.

4.4.1 Applicable Laws, Regulations, and Standards

4.4.1.1 Federal

Endangered Species Act of 1973, 16 USC §1531 et seq.; 50 CFR Parts 17 and 222. The federal Endangered Species Act (ESA) protects species designated as threatened or endangered by prohibiting actions that may jeopardize the continued existence of such species. The ESA includes provisions for the protection and management of plants and animals and may delineate areas of critical habitat for such species. The administering agency for terrestrial and avian species, as well as for non-anadromous freshwater fish, is the U.S. Fish and Wildlife Service (USFWS). Section 7 and 10 of the ESA may require consultation with the USFWS for the protection of such species prior to the implementation of the Proposed Project.

Clean Water Act, Section 404; 33 USC §1251-1376; 30 CFR §330.5(1)(26). The Clean Water Act (CWA), Section 404 regulates restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. The waters include the “Waters of the United States,” which means all navigable waters and tributaries thereof and adjacent wetlands. Any activity that results in the deposit of dredge or fill material within the “Ordinary High Water Mark” of Waters of the U.S. requires a permit, even if the area is dry at the time the activity takes place. Permits issued by the U.S. Army Corps of Engineers (USACE) would require the state to issue a certificate pursuant to Clean Water Act Section 401 (Section 401) that the Proposed Project complies with state water quality standards.

Migratory Bird Treaty Act; 16 USC §703-711; 50 CFR Subchapter B. The Migratory Bird Treaty Act (MBTA) includes provisions for protection of migratory birds. This protection includes prohibitions against any taking of any migratory bird, unless authorized by federal regulation or permit. The current list of species protected by MBTA can be found in 50 CFR §10.13. Loss of non-native species, such as House Sparrows, European Starlings, and Rock Doves, is not covered by this statute. The administering agency for the MBTA is the USFWS.

4.4.1.2 State

California Endangered Species Act of 1984 (CESA); California Fish and Game Code §2050-2098. The CESA provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the California Department of Fish and Game (CDFG), and prohibits the taking of such species without its authorization. The take of state-listed species through incidental or otherwise lawful activities requires a permit pursuant to §2081(b) of the CESA. The CESA also provides protection for those species that are designated as candidates for threatened or endangered listings. With regard to plants, the CESA greatly expanded upon the protection afforded to rare, threatened, and endangered plants under the earlier California Native Plant Protection Act of 1977. Consultation with the CDFG is required for projects

authorized by a state lead agency that could affect a state-listed threatened or endangered species. The state has the authority to issue an incidental take permit under Section 2081 of the Fish and Game Code, or to coordinate with the USFWS during the Section 10(a) process to make the federal permit also apply to state-listed species. Threatened and endangered species are listed in Title 14, CCR §670.2 and 670.5. The administering agency for the CESA is the CDFG.

California Native Plant Protection Act of 1977; California Fish and Game Code §1900 et seq. This law includes provisions that prohibit the taking of listed rare or endangered plants from the wild. The law also includes a salvage requirement for landowners. Furthermore, it provides the CDFG the authority to designate native plants as endangered or rare and provides specific protection measures for identified populations.

California Fish and Game Code, Section 1600-1603. This statute regulates activities that would "substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed of a natural watercourse" that supports fish or wildlife resources. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. A Streambed Alteration Agreement must be obtained for any proposed project that would result in an adverse impact to a river, stream, or lake. If fish or wildlife would be substantially adversely affected, an agreement to implement mitigation measures identified by the CDFG would be required.

California Species Preservation Act. This act provides for the protection and enhancement of the amphibians, birds, fish, mammals, and reptiles of California. The administering agency is the CDFG.

California Fish and Game Code §3503. This section prohibits the taking and possession of any bird egg or nest, except as otherwise provided by this code or subsequent regulations. The administering agency is the CDFG.

California Fish and Game Code §3503.5. This section prohibits the taking, possession, or destruction of any birds-of-prey in the orders *Falconiformes* or *Strigiformes* and their eggs and nests, except as otherwise provided by this code or subsequent regulations. This statute does not provide for the issuance of any type of incidental take permit. The administering agency is the CDFG.

California Fish and Game Code §3511 and 5050. This section prohibits the taking and possession of birds and reptiles listed as "fully protected." The administering agency is the CDFG. The California Natural Diversity Database (CNDDB) was reviewed to identify special-status species potentially present in the Project Area.

California Fish and Game Code §3513 – Adoption of the Migratory Bird Treaty Act. This section provides for the adoption of the MBTA's provisions. As with the MBTA, this state code offers no statutory or regulatory mechanism for obtaining an incidental take permit for the loss of non-game, migratory birds. The administering agency is the CDFG.

4.4.1.3 Local Policies and Ordinances

Local plans and ordinances are evaluated in this report to assist the CPUC and the BLM in determining whether the Proposed Project potentially would be consistent with locally adopted land use plans, goals, and policies. However, since CPUC has preemptive jurisdiction over the construction, maintenance, and operation of public utilities in the State of California, no local discretionary permits (e.g., conditional use permits) or local plan consistency evaluations are required for the Proposed Project or alternatives. SCE would be required to obtain all applicable ministerial building and encroachment permits from local jurisdictions for the Proposed Project.

The Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP) is being developed for the Coachella Valley Association of Governments to guide growth and development in the Coachella Valley for the next 75 years. This plan seeks to preserve a system of natural areas and maintain or restore viable populations of the species included therein. Provisions in the plan allow for take permits from the USFWS (Section 10(a)(1)(A) and 10(a)(1)(B)) and the CDFG (Natural Community Conservation Plan) to be obtained for currently listed species and non-listed species that may be listed in the future. Participation in the plan is voluntary, and municipalities, utility companies, and other entities pursuing development in the Coachella Valley are not required to be permitted under this plan, nor are they required to consider species covered under the plan except in a CEQA context.

4.4.2 Significance Criteria

Impacts to biological resources are considered potentially significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

4.4.3 Applicant Proposed Measures

SCE proposes the following APMs to avoid, minimize, correct, reduce, or eliminate impacts to special status species, or to compensate for impacts to wildlife and plant habitat. These measures will be applied throughout the project study area.

BIO-1. Preconstruction surveys. Preconstruction biological clearance surveys will be performed to minimize impacts to special-status plants and wildlife.

BIO-2. Minimize vegetation impacts. Every effort will be made to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation will be flagged for avoidance.

BIO-3. Avoid impacts to state and federal jurisdiction wetlands. Construction crews will avoid impacting the streambeds and banks of streams along the route to the extent possible. If necessary, a Streambed Alteration Agreement (SAA) will be secured from the CDFG. Impacts will be mitigated based on the terms of the SAA. No streams with flowing waters capable of supporting special status species will be expected to be impacted by the project.

BIO-4. BMPs. Crews will be directed to use Best Management Practices (BMPs) where applicable. These measures will be identified prior to construction and incorporated into the construction operations.

BIO-5. Biological monitors. Biological monitors will be assigned to the project in areas of sensitive biological resource. The monitors will be responsible for ensuring that impacts to special status species, native vegetation, wildlife habitat, or unique resources will be avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities need to be restricted in order to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction.

BIO-6. Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) will be prepared. All construction crews and contractors will be required to participate in WEAP training prior to starting work on the project. The WEAP training will include a review of the special status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all trained personnel will be maintained.

BIO-7. Avoid impacts to active nests. SCE will conduct project-wide raptor surveys and remove trees, if necessary outside of the nesting season (nesting season is usually February 1 to August 31). If a tree or pole containing a raptor nest must be removed during nesting season, or if work is scheduled to take place in close proximity to an active nest on an existing transmission tower or pole, SCE will coordinate with the CDFG and USFWS and obtain written verification prior to moving the nest.

BIO-9. Avian protection. All transmission and subtransmission towers and poles will be designed to be raptor-safe in accordance with the Suggested Practices for Raptor Protection on Power Lines: the State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).

4.4.4 Environmental Setting

4.4.4.1 Biological Resources Study Area Description

The biological resources study area lies within the Coachella Valley, in west-central Riverside County, California. The biotic community present in the Coachella Valley is xeric and considered part of the Lower Colorado River Valley Subdivision of the Sonoran Desert; an area referred to as the Colorado Desert (Jaeger 1957; Raven and Axelrod 1978; Turner and Brown 1982). Elevations of the Proposed Project range from approximately 215 to 875 feet (65 to 267 meters). The Lower Colorado River Valley Subdivision characteristically covers broad alluvial valley floors and is dominated by creosote bush (*Larrea tridentata*), in association with white bursage (*Ambrosia dumosa*) on gravelly soils, and with big galleta grass (*Pleuraphis rigida*) on finer-textured soils (Photograph 4.4-1). Washes that dissect valley bottoms of creosote-bush scrub support woodland-like communities of blue palo verde (*Parkinsonia florida*), ironwood (*Olneya tesota*), and several species of shrubs where soils are coarse and rocky. Where soils are finer-textured, mesquite (*Prosopis* sp.) may occur as a dominant. Washes may also be inhabited by shrubs such as white burrobush (*Hymenoclea salsola*), smoke tree (*Psorothamnus spinosus*), and sweetbush (*Bebbia juncea*).

The Coachella Valley receives great influxes of fine sand washed and blown down from drainages in the San Bernardino and San Jacinto mountains (Griffiths et al. 2002). As a result, the landscape is spatially and temporally dynamic, with sand deposition and erosion occurring almost daily. Sand deposits form on the lee side of shrub hummocks and other obstructions, providing fine-scale topography across an otherwise flat landscape. Vegetation in the resultant sand dunes is sparse and dominated by creosote bush, sandpaper bush (*Petalonyx thurberi*), white dalea (*Psorothamnus emoryi*), and Mojave indigobush (*P. arborescens*). To reduce the infiltration of sandblows across roads, highways, and railroad tracks, windbreaks of tamarisk (*Tamarix* sp.) have been planted along major vehicular routes (e.g., I-10 and UPRR tracks). In addition, some established dune areas have retaining fences designed to minimize (or delay) the movement of sand across the landscape (Photograph 4.4-2).

Photograph 4.4-1. Looking south along the existing subtransmission line from Mirage Substation (left side of photograph) toward I-10, showing the rural/suburban nature of the area. Creosote bush (*Larrea tridentata*), smoke tree (small) (*Psorothamnus spinosus*), white bursage (*Ambrosia dumosa*), and planted eucalyptus trees (*Eucalyptus* sp.) are present.

Photograph 4.4-2. Fine sands west of Gene Autry Trail along the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1), looking northwest toward Gorgonio Pass, June 2006. Fine sands, retaining fences, and tamarisk (*Tamarix* sp.) bordering the UPRR tracks (right of photograph) are shown here.

The climate of the biological resources study area is typical of the Colorado Desert, with high daytime temperatures, low humidity, and low average annual precipitation. Temperatures are high in the summer, with common maximums near 120 degrees Fahrenheit. Winter maximum temperatures average in the upper 60 degrees Fahrenheit. Daily variations of 30 to 50 degrees are common, because of the minimal cloudiness and lack of vegetative cover to hold heat. Low relative humidity accompanies the high summer temperatures, with daytime relative humidity readings frequently between 5 and 10 percent. Precipitation occurs primarily in the winter months (from December to February). The Lower Colorado River Valley Subdivision is the driest of the Sonoran Desert subdivisions (Turner and Brown 1982) because of the high temperatures and low precipitation, with as little as 2 inches of annual rainfall in some places. The City of Palm Springs receives an average of 5.3 inches of rainfall per year (Turner 1994).

The primary land uses in the Coachella Valley are open space, residential, commercial, roads and highways, golf resorts, wind power generation stations, an airport, and habitat preserves. In both Palm Springs and Thousand Palms, there is construction of and plans for new residential developments and infrastructure. Roads in the area receive a high volume of traffic and serve as feeder routes to I-10.

A series of protected areas have been set aside in the Coachella Valley to preserve dune-endemic plants and animals and to maintain sand transport processes. Of particular relevance to the Proposed Project is the Whitewater River Floodplain Preserve and designated Coachella Valley Fringe-toed Lizard Critical Habitat. The Whitewater River Floodplain Preserve occurs south of the UPRR tracks, east of Indian Avenue, west of Gene Autry Trail, and north of Whitewater River Canal, and consists of 1,230 acres of BLM and Coachella Valley Water District land. The primary purpose for this preserve is to provide habitat for Coachella Valley Fringe-toed Lizards. Designated Critical Habitat for the Coachella Valley Fringe-toed Lizard exists near Thousand Palms and the Mirage Substation.

4.4.4.2 Methods

Biologists performed literature reviews, consulted with the USFWS and CDFG, and queried the CNDDB to determine special status species that may be impacted by the Proposed Project. CNDDB queries were centered on the U.S. Geological Survey (USGS) topographic quads of Desert Hot Springs, Palm Springs, Myoma, and Cathedral City topographic quads for the Proposed Project and alternatives. Queries included all immediately adjacent topographic quadrants. Queries for plants included California Native Plant Society (CNPS)-listed plants with CNPS status of 1A, 1B, 2, or 3. CNPS (2001; and online at http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi/Home) and Hickman (1993) were consulted for additional habitat information and range designations for special status plants. For animals, additional information regarding geographic range and habitat was determined by consulting the CDFG's Habitat Conservation Planning Branch website (http://www.dfg.ca.gov/hcpb/species/ssc/ssc.shtml), Ehrlich et al. (1988), Stebbins (2003), Moyle (1976), and the Coachella Valley Multiple Species Habitat Conservation Plan (CVAG 2006; http://www.cvmshcp.org/).

Reconnaissance-Level Surveys

Biologists conducted reconnaissance-level surveys in May, June, and December 2006, and April and July 2007, to characterize habitat for special status species and document existing conditions at the project sites. Surveys were performed by walking or driving (in urban areas)

along a project alternative or substation while noting vegetative communities, documenting presence of special status species, inventorying plants and animals observed, and noting whether habitat existed for Coachella Valley fine-sand endemic species. During surveys, biologists also specifically surveyed for Coachella Valley milkvetch plants (*Astragalus lentiginosus* var. *coachellae*) and habitat. Vegetation communities were categorized according to Turner and Brown (1982).

Wildlife Surveys

Lists were compiled of all wildlife species observed during reconnaissance-level surveys in 2006 and 2007. During surveys, particular attention was given to identifying potential habitat for Coachella Valley Fringe-toed Lizards (*Uma inornata*), Burrowing Owls (*Athene cunicularia*), and Palm Springs Round-tailed Ground Squirrels (*Spermophilus tereticaudus chlorus*). All animals were identified to species if possible, and global positioning system (GPS) coordinates of special status species were determined from hand-held GPS units.

USFWS protocol-level surveys were conducted in June 2006 for federally listed Coachella Valley Fringe-toed Lizards in appropriate habitat. Surveys were conducted on June 7, 9, 14, 16, 20, and 22, 2006, between 8 a.m. and 12 p.m. Ambient temperatures were between 33 degrees and 43 degrees Celsius in direct sunlight at 1 centimeter above the ground. Surveyors walked parallel transects placed 10 meters apart; the total number of transects depended on the width of the survey area and ranged from 3 to 10 meters. The landscape ahead of a surveyor was scanned periodically with binoculars to detect lizards before they flushed. All shrubs were tapped with snake-sticks as they were passed, to flush hiding lizards, and cover items (discarded debris) were lifted to check for lizards hiding underneath. Prior to each daily survey, a reference site of known occupied Coachella Valley Fringe-toed Lizards habitat was visited to confirm that lizards were active and detectable.

4.4.4.3 Vegetation

Plant communities in the biological resources study area consist of finely differentiated subdivisions of the Lower Colorado River Valley Subdivision of Sonoran Desertscrub (Turner 1994).

Creosote Bush-White Bursage Series

The creosote bush-white bursage series dominates the majority of the biological resources study area. Percent ground cover in these areas is low, with a majority of the area consisting of open ground. Associated with these two dominant plants are shrubs (e.g., Mojave indigobush, white burrobush, California broomsage [*Lepidospartum squamatum]*, bladderpod *[Isomeris arborea])*, subshrubs (e.g., brittlebush [*Encelia farinose]*, button brittlebush [*Encelia frutescens]*, sweet bush, white ratany [*Krameria grayi]*), and introduced weeds (Russian thistle [*Salsola kali]*, Sahara mustard [*Brassica tournefortii]*) in varying proportions. Grasses were generally lacking, but some areas featured a fine ground cover of Arabian grass (*Schismus arabicus*).

Sandpaper Bush-Mojave Indigobush Association

The sandpaper bush-mojave indigobush plant community occurs in Palm Springs south of the UPRR tracks, west of Gene Autry Trail. Sandpaper bush and Mojave indigobush are the

dominant shrubs at this location. Substrate is comprised entirely of fine, shifting sands, forming hummocks to the south and a large dune complex to the north, bounded by the southern expanse of a Tamarix windbreak running alongside UPRR tracks. Other plants present here in much smaller proportion include white dalea, mustard, fanleaf crinklemat (*Tiquilia plicata*), and the ubiquitous creosote bush.

Burrobush-Twinbugs Association

The burrobush-twinbugs association occurs in the western Whitewater Floodplain Preserve area. In addition to the co-dominating white burrobush and twinbugs (*Dicoria canescens*), four-wing saltbush (*Atriplex canescens*), mustard, fanleaf crinklemat, California broomsage, and California croton (*Croton californicus*) occur. The area is windswept, with a thin layer of ephemeral fine sands providing substrate over a deeper layer of hard-packed sand and cobble.

Developed

Developed areas occur where the project intersects residential or commercial development. In these areas, ornamental trees, lawns, hedges, and golf courses comprise the vegetation, and paved city streets, sidewalks, parking lots, and buildings are the dominant topographic features. Vehicular traffic may be very heavy at times in these areas.

Ruderal

Parts of the project occur in areas previously developed or routinely disturbed but that have retained a naturalistic setting. Some native vegetation may occur in these areas, such as arrowweed (*Pluchea sericea*), fanleaf crinklemat, California croton, brittlebush, and desert sand verbena (*Abronia villosa*). A high proportion of vegetation is comprised of weedy introduced species such as mustard, Russian thistle, Arabian grass, and tamarisk. Soils in these areas tend to be sandy but compacted and exhibit frequent signs of human influence in the forms of litter or off-road vehicle tracks.

4.4.4.4 Special Status Plants with Potential to Occur

Plants of concern with the potential to occur in the biological resources study area are listed in Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area. Table 4.4.1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area includes conservation status, habitat, and whether observed in the project area.

TABLE 4.4-1
SPECIAL STATUS PLANT SPECIES IN THE SELECTED TOPOGRAPHIC QUADRANTS AND THEIR POTENTIAL TO OCCUR IN THE BIOLOGICAL RESOURCES STUDY AREA (BRSA)[1]

Scientific Name	Common Name	Status	Habitat	Documented in the BRSA
Astragalus lentiginosus var. *coachellae*	Coachella Valley milkvetch	FE, CNPS 1B.2	Shifting sands, less than 350 meters, restricted to the Coachella Valley, where fewer than 20 occurrences have been documented.	Yes (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1])
Chamaesyce arizonica	Arizona spurge	CNPS 2.3	Sandy Sonoran desertscrub, from 50 to 300 meters.	No
Chorizanthe xanti var. *leucotheca*	White-bracted spineflower	CNPS 1B.2	Mojave desertscrub, piñon and juniper woodlands, from 300 to 1,200 meters	No
Ditaxis clariana	Glandular ditaxis	CNPS 2.2	Sandy Mojave and Sonoran desertscrub, from 0 to 465 meters.	No
Matelea parvifolia	Spearleaf	CNPS 2.3	Mojave and Sonoran desertscrub, from 440 to 1,095 meters.	No
Nemacaulis denudata var. *gracilis*	Slender wooly-heads	CNPS 2.2	Coastal and desert dunes, and Sonoran desertscrub, from 50 to 400 meters.	No
Phaseolus filiformis	Slender-stem bean	CNPS 2.3	Sonoran desertscrub, at approximately 125 meters; known only from Coachella Valley.	No
Stemodia durantifolia	Purple stemodia	CNPS 2.1	Mesic, sandy soils in Sonoran desertscrub, from 180 to 300 meters.	No
Xylorhiza cognata	Mecca-aster	CNPS 1B.2	Sonoran desertscrub (Indio and Mecca Hills areas), from 20 to 260 meters in elevation.	No

Status Codes:
FE = Federally Endangered

CNPS (California Native Plant Society) ratings:
1B.2: Rare, threatened or endangered in California and elsewhere; fairly threatened in California
2.1: Rare, threatened or endangered in California, not elsewhere; seriously threatened in California
2.2: Rare, threatened or endangered in California, not elsewhere; fairly threatened in California
2.3: Rare, threatened or endangered in California, not elsewhere; not very threatened in California
3.2: More information is needed; fairly threatened in California

[1]CNDDB query includes results from the Catclaw Flat, Cathedral City, Desert Hot Springs, Morongo Valley, Palm Springs, San Jacinto Peak, Seven Palms Valley, Whitewater, Yucca Valley South, East Deception Canyon, Indio, Keys View, La Quinta, Myoma, Palm View Peak, Rancho Mirage, and West Berdoo Canyon topographic quadrants.

4.4.4.5 Special Status Animals with Potential to Occur

Animal species listed by CNDDB with potential to occur in the biological resources study areas are listed in Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area. Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area includes conservation status, habitat, and whether observed in the project area during reconnaissance- or species-specific surveys.

TABLE 4.4-2
SPECIAL STATUS ANIMALS IN THE SELECTED TOPOGRAPHIC QUADRANTS AND THEIR POTENTIAL TO OCCUR IN THE BIOLOGICAL RESOURCES STUDY AREA (BRSA)[1]

Scientific Name	Common Name	Status	HABITAT	Documented in the BRSA
INVERTEBRATES				
Macrobaenetes valgum	Coachella Giant Sand Treader Cricket	FSC	Shifting sands, less than 350 meters, restricted to the Coachella Valley. Records exist for near the project site at Gene Autry Trail.	No
Stenopelmatus cahuilaensis	Coachella Valley Jerusalem Cricket	FSC	Shifting sands, less than 350 meters, restricted to the Coachella Valley.	No
FISH				
Cyprinodon macularius	Desert Pupfish	FE, CE	Found in desert ponds and other waters, in temperatures to 45 degrees Celsius.	No
REPTILES				
Phrynosoma mcallii	Flat-tailed Horned Lizard	BLMS, CSC	Sand flats and sand dunes, concreted silt and gravel substrates. Historic records exist for Coachella Valley and the project site at Gene Autry Trail, but no observations since the mid-1990s.	No
Uma inornata	Coachella Valley Fringe-toed Lizard	FT, CE	Endemic to fine, shifting sands in Coachella Valley.	Yes (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1])
BIRDS				
Aquila chrysaetos	Golden Eagle	CSC	Remote open hilly and montane areas.	No
Athene cunicularia	Burrowing Owl	BLMS, CSC	Grasslands, desertscrub, agricultural areas. Nests in abandoned ground squirrel burrows. Observed at Farrell-Garnet site (west of Gene Autry Trail at Salvia Road) during surveys in 2006.	Yes (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1])
Buteo regalis	Ferruginous Hawk	CSC	Prairie, grassland, desert, and forest habitats and nests along streams or steep slopes. Nests in very large tree snags. Observed perched on Farrell-Garnet alternative route in December 2006.	Yes non-nesting; (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1])
Falco mexicanus	Prairie Falcon	CSC	Arid, open grasslands or scrub vegetation. Nests on cliffs. Observed flyover on Farrell-Garnet alternative route in December 2006.	Yes non-nesting; (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1])
Lanius ludovicianus	Loggerhead Shrike	CSC	Needs open country and perches to hunt from, and dense shrubs to nest within. Observed on the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) in December 2006.	Yes (Proposed Farrell-Garnet 115 kV Subtransmission Line [Route 1] and Proposed Mirage-Santa Rosa Subtransmission Line [Route 4])
Toxostoma bendirei	Bendire's Thrasher	BLMS, CSC	Desert grasslands and agricultural edges.	No
Toxostoma lecontei	Le Conte's Thrasher	BLMS, CSC	Arid desertscrub and alkali sinks. Intolerant of disturbance. Historic records for Coachella Valley and Farrell-Garnet project site at Gene Autry Trail.	No
MAMMALS				
Chaetodipus californicus femoralis	Dulzura Pocket Mouse	CSC	Shrubland and chaparral habitats with friable soil for burrowing.	No

TABLE 4.4-2
SPECIAL STATUS ANIMALS IN THE SELECTED TOPOGRAPHIC QUADRANTS AND THEIR POTENTIAL TO OCCUR IN THE BIOLOGICAL RESOURCES STUDY AREA (BRSA)[1]

Scientific Name	Common Name	Status	HABITAT	Documented in the BRSA
Chaetodipus fallax fallax	Northwestern San Diego Pocket Mouse	CSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	No
Chaetodipus fallax pallidus	Pallid San Diego Pocket Mouse	CSC	Chaparral and open, sandy areas.	No
Neotoma lepida intermedia	San Diego Desert Woodrat	CSC	Found in shrublands and desert habitats, associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	No
Perognathus longimembris bangsi	Palm Springs Pocket Mouse	BLMS, CSC	Loosely packed or sandy soils with level to gently sloping topography and sparse to moderate vegetative cover. Records for Coachella Valley near project site between UPRR tracks and I-10.	No
Spermophilus tereticaudus chlorus	Palm Springs Round-tailed Ground Squirrel	ESA candidate, CSC	Restricted to the Coachella Valley where it uses desert and alkali scrub, washes, and grassy areas in fine, sandy soils with mesquite.	No
Taxidea taxus	American Badger	CSC	Open coastal sage scrub and desertscrub. Needs large undeveloped areas and high densities of ground squirrels.	No

Status Codes:
FE = Federally Endangered
FT = Federally Threatened
FSC = Federal Species of Concern
ESA Candidate = proposed for listing under ESA
CSC = California Species of Special Concern
CE = California Endangered
BLMS = BLM Sensitive Species

[1]CNDDB query includes results from the Catclaw Flat, Cathedral City, Desert Hot Springs, Morongo Valley, Palm Springs, San Jacinto Peak, Seven Palms Valley, Whitewater, Yucca Valley South, East Deception Canyon, Indio, Keys View, La Quinta, Myoma, Palm View Peak, Rancho Mirage, and West Berdoo Canyon topographic quadrants.

The shifting sands in the Coachella Valley are by definition ephemeral. Plants and animals living within the ephemeral sands possess adaptations for living on the constantly moving substrate. Thus, there are several endemic taxa found in the area that have evolved in isolation from other closely related species, and only exist in the Coachella Valley (Table 4.4-3: Species Endemic to the Coachella Valley, California). Species endemic to the Coachella Valley are listed as species of special concern because of their uniqueness and continued habitat loss and fragmentation.

TABLE 4.4-3
SPECIES ENDEMIC TO THE COACHELLA VALLEY, CALIFORNIA

Scientific Name	Common Name	Status	Habitat	Documented in the BRSA
Astragalus lentiginosus var. *coachellae*	Coachella Valley milkvetch	FE, CNPS 1B.2	Fine, shifting sands in Coachella Valley.	Present west and east of Gene Autry Trail and in Whitewater Floodplain Preserve. Not observed in Mirage-Santa Rosa area.
Macrobaenetes valgum	Coachella Giant Sand Treader Cricket	FSC	Fine, shifting sands in Coachella Valley.	Not observed during surveys in 2006 but records exist for the biological resources study area.
Stenopelmatus cahuilaensis	Coachella Valley Jerusalem Cricket	FSC	Fine, shifting sands in Coachella Valley.	Possible but not documented.
Uma inornata	Coachella Valley Fringe-toed Lizard	FT, CE	Fine, shifting sands in Coachella Valley. Requires large dune complexes.	Present west and east of Gene Autry Trail. Not observed in Mirage-Santa Rosa area.

TABLE 4.4-3 SPECIES ENDEMIC TO THE COACHELLA VALLEY, CALIFORNIA				
Scientific Name	**Common Name**	**Status**	**Habitat**	**Documented in the BRSA**
Perognathus longimembris bangsi	Palm Springs Pocket Mouse	BLMS, CSC	Loosely packed or sandy soils with level to gently sloping topography and sparse to moderate vegetative cover.	Historic records from biological resources study area west of Gene Autry Trail and south of I-10.
Spermophilus tereticaudus chlorus	Palm Springs Round-tail Ground Squirrel	ESA candidate, CSC	Desertscrub, sand dunes, and playas in the Coachella Valley. Preferentially uses stands of mesquite.	Possible but not documented. Little preferred habitat available in biological resources study area.
Status Codes: FE = Federally Endangered FT = Federally Threatened FSC = Federal Species of Concern ESA Candidate = proposed for listing under ESA BLMS = BLM Sensitive Species CNPS code: 1B.2: Rare, threatened or endangered in California and elsewhere; fairly threatened in CA			CE = California Endangered CT = California Threatened CSC = California Species of Special Concern	

4.4.4.6 Proposed Project

Transmission

The Proposed Devers-Coachella Valley 220 kV Loop-In would run north for approximately 0.8 mile from the existing Mirage Substation to the Devers-Coachella Valley 220 kV ROW. Eight LSTs and 1 TSP would be installed, and four LSTs would be removed, constructed, and reconfigured within the Mirage 220 kV ROW to accommodate the proposed 220 kV transmission line loop-in.

Terrain in the area is flat, with elevation varying only by approximately 10 feet. Two unimproved (dirt) roads run south to north; Vista de Oro is adjacent to and east of the nearby residences, and an access road is located adjacent to the existing 220 kV transmission lines. Soils are compacted and consolidated. Percent vegetation coverage in the area is low (25 percent), with the remainder being bare ground. White burrobush is the dominant native plant, with California croton, Mojave Indigobush, white dalea, sandpaper plant, creosote bush, Arizona honeysweet, and *Cryptantha* present as well. Sahara mustard and Arabian grass were found in abundance on the site and may have contributed to the soil compaction observed in the area.

The existing SCE ROW and areas to the east and north are undeveloped open desert, with the exception of the existing transmission towers and access roads. To the west, large (2 to 3 acres), rural, residential lots border the utility corridor, and a 115 kV subtransmission line runs along the property lines. The large yards are used for several activities, including a tree-trimming operation, a native plants nursery, horses and corrals, and vehicles and heavy machinery. Most are vegetated with a variety of ornamental trees and shrubbery.

Of the plant species listed in Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area, Coachella Valley milkvetch is documented to occur approximately 2 miles to the west. Coachella Valley milkvetch was not observed during general biological reconnaissance surveys in the biological resources study area, and the required habitat was not present. However, surveys were not conducted during the plant's flowering period (February to early May), when the plant is much more evident.

Of the animals in Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area, the Coachella Valley Fringe-toed Lizard is documented to occur within 1 mile of the affected portions of the Devers-Coachella Valley and Mirage 220 kV ROWs, although not documented to occur within these ROWs. Although the proposed 220 kV transmission line loop-in would cross USFWS Designated Critical Habitat, the habitat located in these ROWs is unsuitable for this species.

Palm Springs Round-tail Ground Squirrels are documented to occur within 0.5 mile of the proposed 220 kV transmission line loop-in. Pre-construction surveys, monitoring, and mitigation, as described in the APMs, will reduce the likelihood that individuals of either species, if present, would be affected by construction.

Subtransmission

Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1)

The Proposed Farrell-Garnet 115 kV subtransmission line (Route 1) follows the existing 115 kV ROW for its entirety. From Farrell Substation, the proposed route would head north, following the east side of Gene Autry Trail along flat, unimproved desert land for approximately 1.8 miles, before crossing to the west side of Gene Autry Trail. The route would continue north on Gene Autry Trail, then travel in a northwesterly direction until reaching I-10, where the route would continue on the south side of I-10 to Garnet Substation. The majority of this route is within undeveloped and unpopulated desert land. This route would cross approximately 750 feet of Bureau of Land Management (BLM) land south of the UPRR. There is light commercial development at the intersection of Gene Autry Trail and Vista Chino. The route also would cross the Whitewater River drainage area. Proceeding northwest to Garnet Substation, the proposed route would be located within the existing Devers-Farrell-Windland 115 kV subtransmission line ROW and would traverse through hilly terrain (i.e., the Garnet Hills).

At Garnet Substation and going southeast toward Gene Autry Trail, the area is natural, undeveloped landscape dominated by the creosote bush-white bursage (*Ambrosia dumosa*) series of Sonoran desertscrub. Other plants observed include white dalea, Mojave indigobush, burrobrush, sweetbush (*Bebbia juncea*), bladderpod (*Isomeris arborea*), and four-winged saltbush (*Atriplex canescens*). Mustard is dense in places, and Arabian grass and fanleaf crinklemat (*Tiquilia plicata*) provide sparse groundcover. Substrates are generally compacted gravel or sand. As the proposed route turns south and crosses the UPRR tracks, much more dune influence becomes evident. Ephemeral sand dunes and swales are the major substrate, and sandpaper plant, creosote bush, white dalea, and Mojave indigobush dominate the vegetation. As the route nears Farrell Substation, soils again become compacted gravel, and sand and vegetation become weedy. Topography is generally flat, with some rolling undulations north of Garnet Hill.

Of the plant species listed in Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area, Coachella Valley milkvetch is documented to occur on the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives). Mitigation for the milkvetch is likely to be successful at ameliorating negative impacts to other special status plant species, should they occur on the project sites.

Two invertebrate federal species of concern have the potential to occur in the biological resources study area. The Coachella Giant Sand Treader Cricket (*Macrobaenetes valgum*) has been recorded from west of Gene Autry Trail, while the Coachella Valley Jerusalem Cricket (*Stenopelmatus cahuilaensis*) has not been recorded in the biological resources study area. There are no ESA- or CESA-listed invertebrate species with the potential to occur in the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1).

Of the reptiles in Table 4.4-2, the Coachella Valley Fringe-toed Lizard was documented during surveys in June 2006 (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives) to occur on the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1). The Flat-tailed Horned Lizard (*Phrynosoma mcalli*) may potentially occur in areas along the project route, although it was not documented during surveys. Historic records exist for Flat-tailed Horned Lizards near Gene Autry Trail as recently as 1995 (CNDDB 2006). This species is negatively correlated with urban edges and shows decreased abundance within 500 feet of roads (Barrows et al. 2006). As a result, those powerline alternatives that border Gene Autry Trail and Indian Avenue are unlikely to harbor Flat-tailed Horned Lizards. However, mitigation measures developed for the Coachella Valley Fringe-toed Lizard also will protect Horned Lizards, should they be present.

TABLE 4.4-4
SUMMARY OF SPECIAL STATUS PLANTS AND ANIMALS DOCUMENTED BY PROPOSED PROJECT COMPONENTS AND ALTERNATIVES

Proposed Project and Alternatives	Special status plants documented	Special status animals documented	Notes
Proposed Devers-Coachella Valley 220 kV Loop-In	None	None	Crosses USFWS-designated Coachella Valley Fringe-toed Lizard critical habitat. Habitat currently extremely degraded.
Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1)	Coachella Valley milkvetch	Coachella Valley Fringe-toed Lizard, Burrowing Owl, Loggerhead Shrike	Borders Whitewater River Floodplain Preserve. Other non-federally listed species of concern may be present.
Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2	Coachella Valley milkvetch	Ferruginous Hawk, Prairie Falcon, Loggerhead Shrike	Bisects Whitewater River Floodplain Preserve. Other non-federally listed species of concern assumed to be present.
Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3	None	None	Borders Whitewater River Floodplain Preserve. Species of concern assumed to be present.
Proposed Mirage-Santa Rosa115 kV Subtransmission Line (Route 4)	None	Loggerhead Shrike	Disturbed non-dune desert landscape and urban street easements. Habitat nonexistent for most species of concern.
Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5	None	None	Disturbed non-dune desert landscape and urban street easements. Habitat nonexistent for most species of concern.
Intersection of Dinah Shore Drive and Bob Hope Drive	None	None	Disturbed and developed urban/ruderal landscape. Habitat nonexistent for protected species.
Intersection of Date Palm Drive and Varner Road	None	None	Disturbed dune desert landscape with high-traffic roads. Highly compacted sandy soils and abundant weedy plants. Habitat nonexistent for most species of concern
Intersection of Gerald Ford Drive and Portola Avenue	None	None	Completely urban/being developed/graded land
Substations	None	None	Most improvements will occur within the confines of perimeter fences. A new road at Farrell Substation will be built within an already-cleared easement.
Telecommunication Lines	N/A	N/A	Improvements will be made within substations.

Of the birds in Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area, Burrowing Owls were documented near the Proposed Farrell-Garnet 115 kV Subtransmission (Route 1) during biological surveys in June 2006 (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives). Three Burrowing Owls were documented approximately 500 feet north of the proposed route, west of Gene Autry Trail, south of I-10 at Salvia Road. They were not approached at that time. Biologists made return visits in December 2006 and April 2007 and did not observe Burrowing Owls at this location, indicating that those owls observed in June 2006, were migratory. During the December 2006 site survey two burrows previously used by the owls were documented.

Several Loggerhead Shrikes (*Lanius ludovicianus*) were noted along the proposed route on Salvia Road, between Garnet Substation and Gene Autry Trail (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives). Nesting habitat for Loggerhead Shrikes is present in large tamarisk trees bordering the UPRR tracks. A third species, Le Conte's Thrasher (*Toxostoma lecontei*), has been recorded historically within the vicinity of the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) (CNDDB 2006).

None of the special status mammals that have the potential to occur in the biological resources study area (Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area) were documented during surveys. Palm Springs Round-tailed Ground Squirrels are usually found on sandy substrates near mesquite (*Prosopis* sp.; Ball et al. 2005) or in relatively mesic areas with herbaceous growth (CVAG 2006). Very little habitat of either type occurs on the proposed subtransmission line route, and Palm Springs Round-tailed Ground Squirrels were not noted during surveys. Historic records exist for the Palm Springs Pocket Mouse (*Perognathus longimembris bangsi*) west of Gene Autry Trail and south of I-10. Most of the biological resources study area represents suitable habitat. Presence of Pocket Mice and the other small mammals with the potential to occur generally cannot be confirmed without dedicated trapping efforts. However, the Palm Springs Pocket Mouse can be assumed to occur on the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 2). Pre-construction surveys, monitoring, and mitigation, as described in the APMs, would reduce the likelihood that individuals of any mammal species, if present, would be affected by construction.

Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives lists special status species observed within the areas surveyed for the Proposed Project and alternative routes.

Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4)

The Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4) would include the replacement of approximately 1.5 miles of existing single-circuit 115 kV subtransmission lines with new, higher capacity double-circuit 115 kV subtransmission lines and the replacement of support structures within existing SCE ROWs and franchise locations between the Mirage Substation and the existing Santa Rosa-Tamarisk 115 kV subtransmission line. SCE would rebuild an existing single-circuit 115 kV subtransmission line to a double-circuit 115 kV subtransmission line on new structures. From Calle Francisco to an area south of Calle Tosca, SCE would install new structures and a new single-circuit 115 kV subtransmission line within the

existing ROW. From south of Calle Tosca to the south side of I-10, SCE would rebuild an existing single-circuit 115 kV subtransmission line as a double-circuit 115 kV subtransmission line on new structures. The line would utilize an existing line section to the corner of Portola Avenue and Gerald Ford Drive, where it would intersect the existing Santa Rosa-Tamarisk 115 kV subtransmission line. The new 115 kV subtransmission line would traverse undeveloped desert land on the east of Tri-Palm Estates, between Ramon Boulevard and Calle Desierto. Between Calle Desierto and approximately 0.25 mile north of Varner Road, the line would traverse the Tri-Palm Estates golf course. From where the line exits the golf course to the intersection of Gerald Ford Drive and Portola Avenue, the line route traverses undeveloped, desert land.

Special status species with the potential to occur on the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4) (Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area and Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area) have a low potential to occur due to a lack of quality habitat. During extensive surveys in May 2006, no Coachella Valley milkvetch were observed (Table 4.4-4). The Coachella Giant Sand Treader Cricket and Palm Springs Pocket Mouse have historical records of occurrence adjacent to the biological resources study area within the Thousand Palms Preserve. However, areas of fine, windblown sands only occur on 100 feet at the northern end of the subtransmission line, and habitat is not currently present for Coachella Valley sand-endemic species. No Burrowing Owls or potential burrows were documented within the project ROW. Regarding other special status species, only one Loggerhead Shrike was documented during reconnaissance-level surveys in December 2006.

Protected species, other than Loggerhead Shrikes, have a low potential to occur on within the degraded biological resources study area. The APMs would be successful at reducing negative impacts to special status species on the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4).

Subtransmission Line Reconfigurations

The Proposed Project would include pole reconfigurations at three intersections, as described below.

Intersection of Bob Hope Drive and Dinah Shore Drive

SCE would create the Mirage-Capwind-Devers-Tamarisk and Mirage-Santa Rosa-Tamarisk 115 kV subtransmission lines by removing four poles and installing seven support structures at the intersection of Dinah Shore Drive and Bob Hope Drive. There, the existing Garnet-Santa Rosa 115 kV subtransmission line would be split by removing a span of wire that connects the southwest and northeast corner poles. The Santa Rosa-Tamarisk 115 kV subtransmission line would be split at the same intersection by dead-ending and grounding a span of wire that connects the northwest and southeast corner poles. SCE would then connect the former southern segment of the Garnet-Santa Rosa 115 kV subtransmission line by installing taps to the Mirage-Tamarisk 115 kV subtransmission line, forming the new Mirage-Santa Rosa-Tamarisk 115 kV subtransmission line.

The existing conditions at the intersection of Dinah Shore Drive and Bob Hope Drive consist of urban and ruderal vegetation communities. The southwestern and southeastern corners are urban and developed, with a vacation resort at the southwestern corner and new construction at the southeastern corner. The northwestern and northeastern corners are vacant lots consisting primarily of bare ground and non-native, early successional plants (e.g., mustard, Russian thistle).

Intersection of Date Palm Drive and Varner Road

SCE would split the existing Garnet-Santa Rosa 115 kV subtransmission line by dead-ending and grounding a span of wire at a new TSP installed east of Date Palm Drive and south of Varner Road. The existing Devers-Capwind-Concho-Mirage 115 kV subtransmission line would be connected to the Garnet-Santa Rosa 115kV Subtransmission line to form the new Mirage-Capwind-Devers-Tamarisk 115 kV subtransmission line. Five poles would be removed or replaced at this intersection.

The existing condition at the intersection of Date Palm Drive and Varner Road consists of ruderal vegetation communities. Soils consist of compacted sands with a source for windblown sand existing 0.25 mile to the west. Non-native mustard and Arabian grass are the dominant species within the biological resources study area surrounding this intersection. The biological resources study area is impacted by a high volume of street traffic and contains an abundance of liter.

Intersection of Gerald Ford Drive and Portola Avenue

South of I-10, an existing idle, single-circuit 115 kV subtransmission line between I-10 and the intersection of Gerald Ford Drive and Portola Avenue would be connected to the Proposed Mirage-Santa Rosa 115 kV subtransmission line and energized. A wood pole on the northwest corner of Portola Avenue and Gerald Ford Drive would be replaced with a new double-circuit TSP, approximately 50 feet north of the existing wood pole.

The existing conditions at the intersection of Portola Avenue and Gerald Ford Drive are urban, developed, and ruderal vegetation communities. Prior to biological surveys, the property owner had graded the biological resources study area surrounding this intersection. The plants present during the surveys consisted of early successional, non-native annuals.

Substations

The Proposed Project would require the installation, operation, and maintenance of new equipment at 10 substations in the biological resources study area. Earth-disturbing activities would be required at Devers, Farrell, Eisenhower, Mirage, and Tamarisk substations. Most of the proposed substation improvements would be contained within the perimeter fences of the substations, where no species were observed.

Mirage Substation

Mirage Substation is an unstaffed 220/115 kV low-profile substation located in unincorporated Riverside County, in the general vicinity of the community of Thousand Palms. All upgrade

components would be located within the substation's existing fenced perimeter and staged within the substation wall/fence during construction.

Concho Substation

The Concho Substation is an unstaffed 115/12 kV low-profile substation located in Palm Desert. No major equipment, switchrack configurations, structural steel racks, concrete pads, or ground disturbance would occur at Concho Substation for this project. The proposed work at Concho Substation would involve only the installation of new relays. The relays would be upgraded on the existing Concho-Indian Wells-Santa Rosa 115 kV subtransmission line and the existing Concho-Indian Wells 115 kV subtransmission line.

Indian Wells Substation

The Indian Wells Substation is an unstaffed 115/12 kV low-profile substation located in the City of Indian Wells. No major equipment, switchrack configurations, structural steel racks, concrete pads, or ground disturbance would occur at Indian Wells Substation. The proposed work at Indian Wells Substation would involve the installation of new relays. The relays would be upgraded on the existing Concho-Indian Wells-Santa Rosa 115 kV subtransmission line, the existing Concho-Indian Wells 115 kV subtransmission line, and the existing 115 kV bus tie position.

Santa Rosa Substation

The Santa Rosa Substation is an unstaffed 115/33/12 kV low-profile substation located in the City of Rancho Mirage. No major equipment, switchrack configurations, or structural steel racks, concrete pads, or ground disturbance would occur at Santa Rosa Substation for this project. The proposed work at Santa Rosa Substation would include connecting the Mirage-Santa Rosa-Tamarisk 115 kV subtransmission line and the new Mirage-Santa Rosa 115 kV subtransmission line. Additionally, the work would involve the installation of new relays. The relays would be installed on the new Mirage-Santa Rosa-Tamarisk 115 kV subtransmission line and the new Mirage-Santa Rosa 115 kV subtransmission line. Relays would be upgraded for the 115 kV subtransmission line re-arrangements.

Devers Substation

The Devers Substation is a staffed 500/220/115 kV substation located in North Palm Springs. The proposed work at Devers Substation would include the replacement of two 115 kV circuit breakers for the reconfigured Devers-Eisenhower-Thornhill 115 kV subtransmission line and two 115 kV circuit breakers for the reconfigured Mirage-Capwind-Devers-Tamarisk 115 kV subtransmission line. All components would be located within the substation's existing fenced perimeter and staged within the substation. Relays would be upgraded for the Devers-Eisenhower-Thornhill 115 kV subtransmission line and the 115 kV Devers-Mirage-Capwind-Tamarisk 115 kV subtransmission line.

Eisenhower Substation

Eisenhower Substation is an unstaffed 115/33/12 kV low-profile substation located in Palm Springs. The proposed work at Eisenhower Substation would include the installation of two new

TSPs and removal of one TSP for the reconfigured Eisenhower-Tamarisk 115 kV subtransmission line and the reconfigured Devers-Eisenhower-Thornhill 115 kV subtransmission line. The work would include three 115 kV circuit breaker replacement. New relays would be provided for the installation of the reconfigured Eisenhower-Tamarisk 115 kV subtransmission line and the reconfigured Devers-Eisenhower-Thornhill 115 kV subtransmission line, and relays would be upgraded for the 115 kV subtransmission line re-arrangements. All components would be located within the substation's existing fenced perimeter and staged within the substation wall/fence during construction.

Farrell Substation

Farrell Substation is an unstaffed 115/12 KV low-profile substation located in Palm Springs. The proposed work at Farrell Substation would include the installation of one new 115 kV line position designed with a single-breaker configuration, one 115 kV line circuit breaker replacement, and two 115 kV subtransmission line relocations. All components would be located within the substation's existing fenced perimeter and staged within the substation wall/fence during construction. New relays would be installed for the new Farrell-Garnet 115 kV subtransmission line and would be upgraded for the subtransmission line re-arrangements.

A new 16-foot-wide by 30-foot-long paved substation access driveway, with a 16-foot-wide double-drive access gate, would be located along Executive Drive and centered approximately 50 feet from the northeast SCE property corner. The new gate would provide access to the northern portion of the substation during construction of the new 115 kV line and during future construction activities at the substation. The gate would be a secondary access and not used for normal substation operation and maintenance activities.

Garnet Substation

Garnet Substation is an unstaffed 115/33/12 kV substation located in North Palm Springs. No major equipment, switchrack configurations, structural steel racks, concrete pads, or ground disturbance would occur at Garnet Substation during the project. The proposed improvements at Garnet Substation include the conversion of the existing Garnet-Santa Rosa 115kV subtransmission line position to the new Farrell-Garnet 115 kV subtransmission line position, installing new line protection relays, and replacing the existing bus tie protection relays.

Thornhill Substation

Thornhill Substation is an unstaffed 115/12 kV low-profile substation located in Palm Springs. No major equipment, switchrack configurations, structural steel racks, concrete pads, or ground disturbance would occur at Thornhill Substation for the project. The proposed improvements at Thornhill Substation include the conversion of the existing Thornhill-Tamarisk 115 kV subtransmission line to the new Devers-Eisenhower-Thornhill 115 kV subtransmission line and the installation of new line protection relays.

Tamarisk Substation

Tamarisk Substation is an unstaffed 115/12 kV low-profile substation located in Rancho Mirage. The proposed substation scope of work at Tamarisk Substation includes reconfiguring the existing Mirage-Tamarisk 115 kV subtransmission line position to the Mirage-Santa Rosa-

Tamarisk 115 kV subtransmission line position, conversion of the existing Santa Rosa-Tamarisk 115 kV subtransmission line position to the new Mirage-Capwind-Devers-Tamarisk 115 kV subtransmission line position, conversion of the existing Tamarisk-Thornhill 115 kV subtransmission line position to the new Eisenhower-Tamarisk 115 kV subtransmission line position, replacement of one 115 kV circuit breaker, and installation of new line protection relays.

Telecommunication System

The Proposed Project includes the installation of additional telecommunications equipment for relays at Concho, Devers, Eisenhower, Farrell, Garnet, Indian Wells, Mirage, Santa Rosa, Tamarisk, and Thornhill Substations. Additional telecommunication equipment, for telecommunication system interconnects, would be required at Edom Hill Communications Site and Palm Springs Service Center. All telecommunication equipment would be installed within existing buildings.

4.4.5 Impact Analysis

4.4.5.1 Construction Impacts

Potential impacts from construction activities include temporary and/or permanent disturbance, displacement, and/or removal of special status species or their habitat. Such impacts would be temporary, resulting from surface disturbance at tower construction sites, wire-pulling and wire-splicing sites, and construction and staging yards. Ground disturbance may result in habitat degradation as a result of vegetation removal, topsoil removal, soil compaction, or erosion. Vegetation loss also may affect wildlife dependent on plants for food or cover.

Devers-Coachella Valley 220 kV Transmission Line Loop-In

Construction impacts associated with the Proposed Devers-Coachella Valley 220 kV Loop-In would be minimized with implementation of the proposed APMs. Approximately 8.75 acres of USFWS-Designated Critical Habitat for the Coachella Valley Fringe-toed Lizard would be permanently affected by the addition of 9 LSTs and the widening of the existing access and spur roads (see section 3.5 for engineering details). New temporary laydown and pulling areas would be required for construction, resulting in approximately 5.5 acres that would be temporarily affected. To reduce temporary impacts, the areas would be scarified and allowed to return to natural conditions after the completion of work. Although the project route passes through Designated Critical Habitat for the Coachella Valley Fringe-toed Lizard, the area is not occupied and does not provide suitable habitat for these lizards. Acreages of impacts to critical habitat for Coachella Valley Fringe-toed Lizards are summarized in Table 4.4-5: Summary of Potential Special Status Habitat Affected by the Proposed Action on Fringe-toed Lizard Critical Habitat. With the implementation of APMs, and species-specific mitigation measures for Coachella Valley milkvetch, Coachella Valley Fringe-toed Lizards, and Burrowing Owls, impacts to protected species and native vegetation would be reduced to less than significant. There would be no effect on riparian habitats or natural communities as identified in regional plans, and no effect on federally protected wetlands as defined by Section 404. The Proposed Project does not conflict with any local policies protecting biological resources, nor does it conflict with the provisions of any habitat conservation plan. The Proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species. As a result,

impacts to biological resources due to the proposed 220 kV transmission line loop-in would be less than significant.

TABLE 4.4-5
SUMMARY OF POTENTIAL SPECIAL STATUS SPECIES HABITAT AFFECTED BY THE PROPOSED ACTION ON FRINGE-TOED LIZARD CRITICAL HABITAT

ACTION	NUMBER OF STRUCTURES OR AREA AFFECTED
Total number of added LSTs	9
Area affected by footprint of added structures	Approximately 8.2 acres (permanent)
Total number of removed LSTs	4
Area affected by removed structures	3.7 acres (temporary)
Area affected by widening access road and spur roads	0.55 acre (1,320 feet) (permanent)
Total number of laydown areas	4 (temporary)
Area affected by laydown areas	0.92 acre (temporary)
Total number of pulling/splicing sites	5 (temporary)[1]
Area affected by pulling/splicing sites	Approximately 4.5 acres (temporary)

[1] Disturbance for the pulling sites will coincide with the disturbance of the installation of the new structures, resulting in no additional permanent or temporary impacts

Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1)

Construction impacts along the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) would be minimal because the project only proposes the replacement of existing LSTs. Existing access roads would be used to the greatest extent possible, and in areas with sensitive biological resources, temporary mats, rather than gravel, would be used for road-lining. Although new temporary spur roads might be needed for construction, they would be reseeded or scarified and allowed to return to natural conditions after the completion of work. Replacement poles would not impede the flow of sands through the area. Acreages of impacts to habitat for listed species are summarized in Table 4.4-6: Summary of Potential Special Status Species Habitat Affected by the Proposed Action. With the implementation of APMs and species-specific measures for Coachella Valley milkvetch, Coachella Valley Fringe-toed Lizards, and Burrowing Owls, impacts to protected species and native vegetation would be minimized. As a result, impacts to biological resources due to the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) would be less than significant. There would be no effect on riparian habitats or natural communities as identified in regional plans, and no effect on federally protected wetlands as defined by Section 404. The Proposed Project does not conflict with any local policies protecting biological resources, nor does it conflict with the provisions of any habitat conservation plan. The Proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species. As a result, impacts to biological resources due to the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route1) would be less than significant.

TABLE 4.4-6 SUMMARY OF POTENTIAL SPECIAL STATUS SPECIES HABITAT AFFECTED BY THE PROPOSED ACTION	
ACTION	**NUMBER OF STRUCTURES OR AREA AFFECTED**
Number of structures to be removed in Coachella Valley Fringe-toed Lizard and milkvetch habitat	8[1]
Area affected by removed structures	Approximately 0.48 acre (temporary)
Total number of new structures	Approximately 9
Area affected by installation of new structures	Approximately 0.54 acre (permanent)
Number of pulling/splicing sites	1 (temporary)[2]
Area affected by pulling/splicing sites	Approx. 2 acres (temporary)
[1] 4 structures removed west of Gene Autry Trail and 4 structures removed to the east. [2] Disturbance for the pulling sites will coincide with the disturbance of the installation of the new structures, resulting in no additional permanent or temporary impacts	

Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4)

Along the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4), construction impacts to biological resources would be minimal. The project is planned to replace existing poles with new poles, except where the subtransmission line crosses Tri-Palm Golf Course, where construction of a new line begins. Existing access roads will be used, to the greatest extant possible, during construction. Although new spur roads might be needed, after the completion of work they will be scarified and allowed to return to natural conditions. Although the project route borders, in part, the western edge of designated Coachella Valley Fringe-toed Lizard Critical Habitat, the area is not occupied and does not provide suitable habitat for these lizards. With the implementation of APMs and species-specific mitigation measures for Coachella Valley milkvetch, Coachella Valley Fringe-toed Lizards, and Burrowing Owls, impacts to protected species and native vegetation would be minimized. As a result, impacts to biological resources along the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4) would be less than significant. There would be no effect on riparian habitats or natural communities as identified in regional plans and no effect on federally protected wetlands as defined by Section 404. The Proposed Project does not conflict with any local policies protecting biological resources, nor does it conflict with the provisions of any habitat conservation plan. The Proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species. As a result, impacts to biological resources due to the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4) would be less than significant.

Dinah Shore Drive and Bob Hope Drive

This intersection has a high traffic volume, with two of the four corners commercially developed. The two remaining corners consist of non-native, early successional plants. Due to the lack of potential habitat, the proposed pole reconfigurations at the intersection of Dinah Shore Drive and Bob Hope Drive would have a less than significant effect on biological resources for all significance criteria listed in Section 4.4.2.

Date Palm Drive and Varner Road

The intersection of Date Palm Drive and Varner Road is undeveloped but is routinely disturbed due to the proximity of the two high-traffic-volume streets nearby. Habitat does not exist for

either Coachella Valley milkvetch or Coachella Valley Fringe-toed Lizard due to the compacted sandy soils. Vegetation on the project site consists of non-native, early successional vegetation, particularly Sahara mustard. With the implementation of the APMs, the proposed pole reconfigurations at the intersection of Date Palm Drive and Varner Road would have a less than significant effect on biological resources in the biological resources study area for all significance criteria listed in Section 4.4.2.

Gerald Ford Drive and Portola Avenue

The intersection of Gerald Ford Drive and Portola Avenue is currently being developed. The area is dominated by bare, recently graded ground. The proposed pole reconfigurations at the intersection would have no impact on biological resources in the biological resources study area for all significance criteria listed in Section 4.4.2.

Substation Modifications

The proposed construction work at Concho, Devers, Eisenhower, Garnet, Mirage, Santa Rosa, Tamarisk, and Thornhill Substations would be contained within the fenced boundary of each substation. The substations have all been graded and maintained with a gravel substrate. The substations have a low potential for sensitive resources to inhabit areas adjacent to the exterior fences. With the implementation of the APMs, the proposed substation work would have a less than significant on biological resources for all significance criteria listed in Section 4.4.2.

Farrell Substation

A majority of construction would be contained within the fenced boundaries of the Farrell Substation with the construction of a small access road to the east of the substation between Executive Drive and the perimeter wall. The access road would be within the currently cleared and graded SCE easement, which contains one ornamental shrub and no sensitive biological resources. With the implementation of the APMs, the proposed substation upgrades or road construction at Farrell Substation would have a less than significant impact on biological resources for significance criteria listed in Section 4.4.2.

Telecommunication System

The existing fiber optic cables would be transferred from the existing poles to the new 115 kV subtransmission poles within existing SCE ROWs and franchise locations. No new fiber optic cable would be installed for this project. The proposed upgrades to the telecommunication system would have no impact on biological resources for significance criteria listed in Section 4.4.2.

4.4.5.2 Operational Impacts

The Proposed Devers-Coachella Valley 220 kV Loop-In would be built within a long-existing and frequently maintained utility corridor. Habitat is currently degraded and has a low potential for listed species. Workers and vehicles would remain on existing access roads during operation and maintenance procedures. As a result, there would be no take of listed species during operation of the proposed 220 kV transmission line loop-in.

SCE anticipates that the proposed subtransmission lines would require annual operation and maintenance activities, as required by the CPUC. The proposed subtransmission line upgrades would occur within long-existing utility line corridors. Portions of the Proposed Farrell–Garnet 115 kV Subtransmission Line (Route 1) corridor contain habitat for Coachella Valley milkvetch or Coachella Valley Fringe-toed Lizard. If operation and maintenance activities are required in Coachella Valley milkvetch or Fringe-toed Lizard habitat, the use of motorized equipment will be restricted to existing access roads, with workers walking to the LSTs to the greatest extent possible.

When working in Coachella Valley milkvetch habitat, workers and vehicles will remain on existing access roads and a compensation fee (see Section 4.4.6, below) will mitigate any take of Coachella Valley milkvetch during operation and maintenance of the subtransmission line. In Coachella Valley Fringe-toed Lizard habitat in the Farrell-Garnet 115 kV ROW, access for operational procedures will be by foot to avoid impacts to listed species to the greatest extant possible. The lizards are highly motile and will readily flee prior to being approached during operations activities. As a result, there will be no take of Coachella Valley Fringe-toed Lizards during operation of the subtransmission line.

If mechanized equipment is necessary during operations and maintenance activities, the APMs and biological mitigation measures, outlined in Sections 4.4.2 and 4.4.6, respectively, would be employed. With avoidance and the APMs and mitigation measures proposed, maintenance of the proposed subtransmission line would have a less than significant impact on Coachella Valley milkvetch or Coachella Valley Fringe-toed Lizards. There would be no effect on riparian habitats or natural communities as identified in regional plans, and no effect on federally protected wetlands as defined by Section 404. Operation and maintenance activities would not conflict with any local policies protecting biological resources, nor would they conflict with the provisions of any habitat conservation plan. The operation and maintenance activities would not interfere substantially with the movement of any native resident or migratory wildlife species. As a result, subtransmission line operation and maintenance activities would have a less than significant impact to biological resources.

4.4.6 Biological (Species-Specific) Mitigation Measures

In addition to the APMs, specific measures would be incorporated to mitigate potential impacts to Coachella Valley milkvetch and Coachella Valley Fringe-toed Lizards. Both species are known to occur along the Proposed Farrell-Garnet Subtransmission Line (Route 1). Although Burrowing Owls have not been documented within the SCE ROWs or franchise locations, mitigation measures are proposed here to minimize potential impacts to the species.

BIO MIT-1. Coachella Valley Milkvetch. Surveys for Coachella Valley milkvetch will be performed within 1 year prior to construction, between February and early May, during the plant's growing and flowering season. GPS coordinates of plant locations will be recorded with high precision (to within 1 meter) and stored in an electronic database. Plants will be marked conspicuously with pin flags and avoided during construction to the greatest extant possible. Following the completion of construction, areas compacted during temporary construction activities (e.g., lay-down areas, pulling sites) will be scarified, if deemed necessary, to enhance germination of this species.

A compensation fee for habitat loss shall be paid to BLM or a land conservation organization, as approved by the USFWS, for acquisition of replacement habitat. The agreed-upon fee amount will be $5,000 (not to exceed $7,246) per acre for the three acres of temporary impacts ($15,000 total). In addition, there will also be a one-time fee of 15 percent, in the amount of $2,250 (not to exceed $3,261) to cover overhead costs associated with habitat acquisition. Total compensation funds will not exceed $25,000 without the written concurrence of SCE, BLM, and the USFWS. These actions shall be coordinated with the BLM or a land conservation agency and approved by the USFWS. Funds shall be paid prior to beginning the Proposed Project and will mitigate both direct/indirect impacts of construction and operations and management.

BIO MIT-2. Coachella Valley Fringe-toed Lizard. Coachella Valley Fringe-toed Lizards are restricted to isolated deposits of loose windblown sand associated with hummocks. west and east of Gene Autry Trail (where the road crosses the UPRR tracks). The Farrell-Garnet easement in this area encompasses approximately 3.35 acres of potential habitat, of which approximately 1.0 acre was occupied by Fringe-toed Lizards in June 2006. While active, Coachella Valley Fringe-toed Lizards flee readily from danger and threats and will be inclined to move as construction activities begin. All construction work within Coachella Valley Fringe-toed Lizard habitat will be performed during the lizards' active season. Determination of the active season will be based on temperatures being consistently above 80 degrees Fahrenheit and the observation of activity at a nearby reference population. The active season is typically between May and September. Specific protections that SCE will implement for the Coachella Valley Fringe-toed Lizard are summarized as such:

1. Protocol-level surveys will be conducted within 1 year of construction activities to determine presence or absence of Coachella Valley Fringe-toed Lizards.

2. All construction areas in Coachella Valley Fringe-toed Lizard habitat will be fenced and completely enclosed to keep the lizards from entering active work areas. Fencing will include fences leading up to and encircling the specific subtransmission poles where work will be performed and along the western edge of Gene Autry Trail, north along the overpass (to prevent lizards from entering the road). Silt fencing will be used and buried to a depth of 8 to 12 inches. The access end of the enclosed area shall be kept closed except to allow immediate access to equipment and personnel. An area between the existing tamarisk trees (bordering the UPRR tracks) and the northern-most pole south of the railroad tracks will remain unfenced to allow Fringe-toed Lizards to move back and forth.

3. Qualified biologists shall conduct clearance surveys within the enclosed construction sites. Parallel transects spaced 20 feet apart will be performed within 48 hours before the initiation of construction. Surveys shall provide 100-percent coverage of the entire enclosed construction area. The area underneath shrubs and surrounding large rocks and boulders will be gently raked to expose hidden lizards. Surveys will be repeated and construction not allowed to begin until two consecutive surveys fail to reveal Fringe-toed Lizards.

4. A biological monitor will oversee all construction activities within Fringe-toed Lizard habitat. The monitor will have in their possession a federal 10(a)(1)(A) permit and associated Memorandum of Understanding (MOU) from CDFG. When a Coachella

Valley Fringe-toed Lizard is found during surveys, the exclusionary fencing will be opened or lifted, and the lizard will be encouraged to run through the opening to the outside of the work area, after which the fencing will be closed again. Capture of Fringe-toed Lizards will be allowed by net, noose, or by hand only if a lizard is not moving out of the fenced project area through encouragement or of its own volition. A new pair of latex or synthetic gloves will be used for each lizard handled.

5. If any Coachella Valley Fringe-toed Lizards are captured as above, they will be released immediately to the west of the project footprint (to a distance of up to 500 feet outside the enclosed area, away from any active roadways) in loose sand contiguous with the area at which construction is occurring. The immediate area will be searched for snakes, and if found, a different microsite will be found. Fringe-toed Lizards will be released in the shade of a shrub. No lizards will be in captivity or in transport for longer than 10 minutes after their initial capture within an enclosed construction area. Lizards will be transported in clean, white, plastic 5-gallon buckets.

6. All movement of construction vehicles outside of the ROW will be restricted to pre-designated access, contractor-acquired access, or public roads.

7. If road stabilization is required for the temporary access roads, the materials used for stabilization will consist of temporary, easily removable material (e.g., mats laid down on sand, rather than gravel).

8. The real limits of construction within the ROW will be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.

9. Construction and maintenance vehicles will not exceed a speed of 10 miles per hour in Coachella Valley Fringe-toed Lizard habitat.

10. To the extent possible, construction operations within habitat for the Coachella Valley Fringe-toed Lizard shall occur when the air temperatures 1 inch above the ground in the shade are between 96 degrees and 112 degrees Fahrenheit, preferably between April 1 and October 30, contingent upon activity being observed at a nearby reference population. However, if protocol-level clearance surveys have been performed within 48 hours prior to construction, work may proceed (with a biological monitor present) outside of these parameters (e.g., construction during the evening hours).

11. Any spoils will be stockpiled in previously disturbed areas that have been examined for the presence of Coachella Valley Fringe-toed Lizards by a qualified biologist. Those areas will be fenced and cleared of lizards prior to use as in steps 1 through 5 above.

12. Existing sand-retaining lattice fences in the ROW will be repaired or replaced.

13. After construction, compacted soils will be scarified and seeded with twinbugs (*Dicoria canescens*) in low density.

14. Clearance surveys will be repeated if more than 72 hours elapse between work sessions, if any portion of a fence is removed or blown down, or if measurable rainfall occurs.

BIO MIT-3. Burrowing Owl. During and prior to breeding season, preconstruction surveys will be performed in all work areas to identify areas where Burrowing Owls or potential burrows exist. Previously documented burrows will be revisited. Potential burrows will be searched to determine occupancy, and if vacant, will be collapsed outside of nesting season. In collaboration with CDFG and the accepted relocation strategy, occupied burrows, if any, will be fitted with exclusionary devises that allow exit, but not re-entrance, of a Burrowing Owl into a burrow outside of nesting season. If active burrows are located during nesting season, construction within 450 feet of the burrow will be delayed until the young have fledged.

4.4.7 Alternatives

4.4.7.1 Environmental Setting

Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2

The Farrell-Garnet 115 kV subtransmission line Alternative Route 2 would head south from Farrell Substation on Gene Autry Trail to Vista Chino. The line would then head west and would overbuild existing distribution lines on new support structures for approximately 1.25 miles along Vista Chino. At Sunrise Way, the route would turn north, and the new 115 kV subtransmission line would overbuild existing distribution line on new support structures for approximately 1.0 miles to San Rafael Road. From San Rafael Road to Four Seasons Boulevard, approximately 0.5 mile would be constructed underground.[1] From Four Seasons Boulevard to the intersection of the existing Devers-Farrell-Windland 115 kV subtransmission line, for approximately 2.5 miles, the new line would overbuild the existing distribution line on new support structures within existing SCE ROWs. The route would then turn west, and the new line would be constructed with the existing Devers-Farrell-Windland 115 kV subtransmission line on new double-circuit support structures on the south side of I-10 to Garnet Substation.

Special status species with the potential to occur on the Farrell-Garnet 115kV Subtransmission Line Alternate Route 2 are the same as for the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) (Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area and 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area). Of the potential species to occur, Coachella Valley milkvetch and three avian species of concern were documented during the

[1] *Residential developers in this area were required by the City of Palm Springs to underground existing distribution lines. These lines were undergrounded in accordance with SCE's Rule 20B.*

reconnaissance surveys (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives). Focused surveys for the Coachella Valley Fringe-toed Lizard were not conducted for this alternative. During winter surveys, one Ferruginous Hawk and one Prairie Falcon were observed perched on SCE poles and foraging near the powerline over the Whitewater Floodplain Preserve. Whether Ferruginous Hawks nest in the area is unknown; however, no buteo nests (large stick nests) were observed during surveys. Nesting habitat for Prairie Falcons, characterized as depressions with overhangs on rocky cliffs (Wheeler 2003), is not present in the project area. Prairie Falcons are not expected to nest near the proposed or alternate powerline corridors or existing substations. Loggerhead Shrikes were noted along Salvia Road. Nesting habitat is present in large tamarisk trees bordering the UPRR tracks. Habitat does not exist for any of the ESA- or CESA-listed birds along this alternative subtransmission line corridor.

Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3

From Farrell Substation to San Rafael Road, the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3 would follow the same route as Alternative Route 2. Alternative Route 3 then would turn west on San Rafael Road and then north on Indian Canyon Drive, to Garnet Substation. As with Alternative Route 2, this alternative route primarily would cross undeveloped and unpopulated desert land and existing low density residential communities. Alternative Route 3 would cross the Whitewater River drainage, adjacent to the Whitewater River Floodplain Preserve, along Indian Canyon Drive.

Special status species with the potential to occur on this alternate are the same as for the Proposed Farrell-Garnet 115 kV Subtransmission Line (Route 1) (Table 4.4-1: Special Status Plant Species in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area and Table 4.4-2: Special Status Animals in the Selected Topographic Quadrants and Their Potential to Occur in the Biological Resources Study Area). Species of concern were noted adjacent to the alternate route (Table 4.4-4: Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives) but have not been documented within the corridor.

Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5

Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5 would include approximately 1.5 miles of underground cable, installed from Mirage Substation, west on Ramon Road to Monterey Avenue, south on Monterey Avenue to Varner Road, then southeast on Varner Road to a point where it would join the Mirage-Concho-115 kV overhead subtransmission line. This portion of Alternative Route 5 would be constructed underground due to the existence of an overhead IID 92 kV line on the south side of Ramon Road and the west side of Monterey Avenue and overhead IID distribution lines on the east side of Monterey Avenue. Alternative Route 5 would cross the I-10 overhead on TSPs and would connect to an existing overhead line south of the I-10. At the corner of Portola Avenue and Gerald Ford Drive, Alternative Route 5 would connect to the existing Santa Rosa-Tamarisk 115 kV subtransmission line. Alternative Route 5 would pass under the middle of three streets that run through light commercial, industrial, and residential neighborhoods.

Similar to the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line (Route 4), special status species have a low potential of occurrence due to a lack of quality habitat (Table 4.4-4:

Summary of Special Status Plants and Animals Documented by Proposed Project Components and Alternatives). Most of the alternative route would be built within paved city streets bordered by ornamental tree plantings, thus most species with the potential to occur in the area would not be encountered during construction.

4.4.7.2 Construction Impacts

Farrell-Garnet 115kV Subtransmission Line Alternative Route 2

The Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2 potentially could have a significant impact on biological resources. Access to the project area would have to be created and maintained, resulting in greater permanent impacts within the Whitewater Floodplain Preserve and to habitat of sensitive biological resources. Therefore, there would be an impact on riparian habitats or natural communities as identified in regional plans, and there may be an impact on federally protected wetlands as defined by Section 404. Alternative Route 2 may conflict with local policies protecting biological resources and may conflict with the provisions of habitat conservation plans, such as the Coachella Valley MSHCP. The alternative would not interfere substantially with the movement of any native resident or migratory wildlife species. Without the implementation of APMs and mitigation measures, the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2 would have a significant impact to biological resources.

Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3

The Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3 would have a less than significant impact on biological resources. There would be no effect on riparian habitats or natural communities as identified in regional plans, and no effect on federally protected wetlands as defined by Section 404. The alternative would not likely conflict with any local policies protecting biological resources but may conflict with the provisions of habitat conservation plans, such as the Coachella Valley MSHCP. The alternative would not interfere substantially with the movement of any native resident or migratory wildlife species. With the implementation of APMs, the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3 would have a less than significant impact to biological resources.

Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5

The Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5 would have a less than significant impact on biological resources. There would be no effect on riparian habitats or natural communities as identified in regional plans and no effect on federally protected wetlands as defined by Section 404. The alternative may not conflict with any local policies protecting biological resources, but may conflict with the provisions of habitat conservation plans, such as the Coachella Valley MSHCP. The alternative would not interfere substantially with the movement of any native resident or migratory wildlife species. With the implementation of APMs, the Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5 would have a less than significant impact to biological resources.

4.4.7.3 Operational Impacts

Similar to the Proposed Project, SCE anticipates that the alternative subtransmission lines would require annual operation and maintenance activities, as required by the CPUC, after construction. The subtransmission line alternatives would be constructed within a long-existing utility line corridor. Portions of the corridor contain habitat for Coachella Valley milkvetch or Coachella Valley Fringe-toed Lizard. If operation and maintenance activities are required in Coachella Valley milkvetch or fringe-toed lizard habitat, the use of motorized equipment will be restricted to existing access roads, with workers walking to the LSTs to the greatest possible.

When working in Coachella Valley milkvetch habitat, workers and vehicles will remain on existing access roads. Impacts to the Coachella Valley milkvetch may not be avoidable and could result in impacts to the species. In Coachella Valley Fringe-toed Lizard habitat, access for operational procedures will be by foot, to avoid impacts to listed species to the greatest extent possible. The lizards are highly motile and will readily flee prior to being approached during operational activities. As a result, there would be no take of Coachella Valley Fringe-toed Lizards during operation of the subtransmission line. If mechanized equipment is necessary during operation and maintenance activities, the APMs will be employed.

The maintenance of Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2 could potentially have a significant impact on Coachella Valley milkvetch. There would be a potential impact to riparian habitats or natural communities as identified in regional plans, as well as, potential impacts to federally protected wetlands as defined by Section 404. The operations and maintenance of the alternatives would not conflict with any local policies protecting biological resources, but may conflict with the provisions of habitat conservation plan, such as the Coachella Valley MSHCP. Operation and maintenance of the alternatives would not interfere substantially with the movement of any native resident or migratory wildlife species. Without the implementation of APMs and mitigation measures, the operation and maintenance of the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 2 would have a significant impact to biological resources.

The maintenance of the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3 would have a less than significant impact on biological resources. With the implementation of APMs and mitigation measures, the Farrell-Garnet 115 kV Subtransmission Line Alternative Route 3 would have a less than significant impact to biological resources for all significance criteria listed in Section 4.4.2.

The maintenance of Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5 would have a less than significant impact on biological resources. With the implementation of APMs and mitigation measures, the Mirage-Santa Rosa 115 kV Subtransmission Line Alternative Route 5 would have a less than significant impact to biological resources for all significance criteria listed in Section 4.4.2.

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